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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/852,433

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Hemal V. Shah

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06/01/2005

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EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,433

Applicant(s)

SHAH ET AL.

Examiner

Anh-Vu H. Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date March 07, 2005.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application. (PTO-152)
6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

1. This communication is in response to applicant's amendment filed March 07, 2005.

Claims 1-36 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-2, 4-14, 16-26, and 28-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Brendel (US Patent No. 6,772,333B1).

With respect to claims 1, 9, 13, 21, 25, and 33, Brendel discloses (col. 9, line 31 – col. 10, line 17 and Fig. 8) that the load-balancer is activated when a connection is received by web farm from the network (receiving a data packet from a source). The load-balancer parses the

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incoming request data for a SSL session ID field (determining whether a session identity exists for a communication session with the source). When no matching SSL session ID is found in the table, then the connection is for a new SSL session. The server is assigned using the default load-balancing method (transmitting the data packet to a destination if no session identity exists). The server-generated SSL session ID, which is then returned from the server in the same connection as part of the response to the encrypted client request, is stored in a new or empty entry in the table, along with the server the connection was assigned. Thus the new server assignment for the SSL session is stored in the table (receiving the session identity from the destination). Subsequent connections having the same SSL session ID will be directed to the same server (transmitting subsequent data packets received from the source along with the session identity to the destination).

With respect to claims 2, 14, and 26, Brendel discloses (col. 9, lines 2-12 and Fig. 7) that the load-balancer will attempt to find the SSL session identity for this ID in its SSL session table using SSL ID field 90. Herein, SSL ID field 90 is the address information (searching a table using the address information for the session identity).

With respect to claims 4-5, 16-17, and 28-29, Brendel discloses (col. 10, lines 6-9) that the server is assigned using the default load-balancing method, whether random, least-used, or some other assignment method. This implies that the destination address of the request is replaced by the address of the assigned server (at least one of a destination identity field)

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(selecting a particular destination; adding a header to the received data packet; and transmitting the header along with the received data packet to the destination).

With respect to claims 6, 10, 12, 18, 22, 24, 30, 34, and 36, Brendel discloses in Fig. 8, a flowchart indicating load-balancing for connections that are assigned to the same server. Therefore, the destination address of the reply packet is the address of the load-balancer (not transmitting at least part of the source's address information in the received data packet). Once the load-balancer receives the reply packet, the destination address is replaced with the client address (removing a header prior to transmitting the data packets received from the destination to the source; and using information in the header to transmit data packets received from the destination to the source).

With respect to claims 7, 19, and 31, Brendel discloses in Fig. 8, a flowchart indicating load-balancing for connections that are assigned to the same server. It should be understood that in the reply packets, the header always contains the port and address information for receiving the reply packets (wherein the information in the header comprises source port identity).

With respect to claims 8, 20, and 32, Brendel discloses (col. 10, lines 14-15) that subsequent connections having the same SSL session ID will be directed to the same server. This implies that the address information of the source is not included in the request packet (not transmitting at least part of address information in the received subsequent data packets to the destination).

With respect to claims 11, 23, and 35, Brendel discloses (col. 10, lines 9-13) that the server-generated SSL session ID, which is then returned from the server in the same connection as part of the response to the encrypted client request, is stored in a new or empty entry in the table, along with the server the connection was assigned. This implies that the server must have a table for storing information related to the connection assigned and the SSL session ID (obtaining network address information of the network node using the session identity comprises using session identity as a pointer to the network node's address information).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 15, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brendel (US Patent No. 6,772,333B1).

With respect to claims 3, 15, and 27, Brendel discloses in Fig. 7, the load-balancer reads the incoming packets, extracts the SSL session ID, and finds the SSL session entry in the SSL session table. Brendel does not disclose that using the address information in a hash function to obtain a hash value; and using the hash value to find the session identity. However, hash function is well known in the art. Therefore, it would have been obvious to one having ordinary

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skill in the art at the time the invention was made to include hash function for searching in Brendel's system, since hash function is fast and thorough.

Response to Arguments

4. Applicant's arguments filed March 07, 2005 have been fully considered but they are not persuasive.

Applicant argues in page 17 that Brendel does not disclose determining whether a session identity exists and receiving the session identity from the destination. Examiner respectfully disagrees.

Brendel discloses (col. 10, lines 5-13) that when no matching SSL session ID is found in the table, then the connection is for a new SSL session (herein, a request is received by the load-balancer as illustrated in Fig. 2). The server (destination) is assigned using the default load-balancing method, whether random, least-used, or some other assignment method (herein, the request is forwarded to the chosen server after the session identity is checked and not found). This implies that a server is chosen and the request is forwarded to that chosen server by the load-balancer (determining whether a session identity exists). Further, it is already determined that a session identity does not exist for this connection, since it is a new connection. Brendel further discloses that the server-generated SSL session ID (the chosen server), which is then returned from the server in the same connection as part of the response to the encrypted client request, is stored in a new or empty entry in the table, along with the server the connection is assigned to. Thus, the new server assignment for the SSL session is stored in the table. This implies that a session identity is generated, returned, and stored in the table of the load-balancer

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for the new connection after it is already confirmed that the session identity does not exist in the table.

Brendel discloses (col. 9, line 31 – col. 10, line 17 and Fig. 8) a method of checking the request to see if it contains the session identity in the header, if no, a server is chosen, and a session identity is generated and returned by that chosen server and is stored in the load-balancer.

Therefore, Brendel discloses all the limitations as recited in each of the pending claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


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